

St. Peter's Hospital Antimicrobial Stewardship Program

At Saint Peter's Hospital (SPH), efforts surrounding formal Antimicrobial Stewardship (AMS) began in early 2016 with several physician groups in the hospital naming AMS as a quality initiative for 2016 and allocation of funding within the budget for recruitment and hiring of a designated pharmacist to develop an AMS service and serve as a core member of the AMS team.

Development of the AMS program initially involved creation of a regulatory gap-analysis to help identify areas of weakness but also to outline how SPH would build the program. The CDC Core Elements served as the primary backbone for building the AMS program, supported by the Joint Commission and Centers for Medicare/Medicaid Services guidance for development of an AMS program. This ensures that the AMS program at SPH was not only compliant with regulatory agencies, but also congruent with best-practice ideology and evidence-based policies woven directly into the service.

Evidence of the foundational influence from the CDC Core Elements is reflected by (but not limited to) the following parts of the AMS Program at SPH:

- Leadership support of AMS program as evidenced by written letter of support by hospital CEO.
- Budgeted financial support for AMS program as evidenced by allocation of funds for pharmacist FTE and addition of decision support software Sentri7.
- Formal development of an AMS team. Identification of physician and pharmacist leader for AMS (Dr. Don Skillman and Heidi Simons, PharmD, BCPS). Other AMS team members include representatives from microbiology lab, infection prevention, informatics, and nursing.
- Yearly compilation of bacterial resistance data for antibiogram, created in conjunction with Microbiology. Yearly distribution of paper copies to staff, published on the SPH website.
- Evidenced-based order sets for infections (based on site of infection/indication) created specifically for SPH using Infectious Diseases Society of America Guidelines, primary literature as needed, and the SPH Antibiogram.
- Antibiotic restriction policies approved by the Pharmacy and Therapeutics Committee that require authorization by AMS team prior to use (see AMS Policy and Restricted Drug Policies).
- Monitoring of adherence to AMS policies by AMS pharmacist and physician.
- Daily prospective audit with feedback performed by AMS pharmacist, with help from AMS physician for complex cases.
- IV to PO interchange policy and Renal Dosing policy to aid in optimizing antibiotic therapy.
- Extended-infusion Piperacillin/Tazobactam as a standard to improve pharmacodynamics of our beta-lactam therapy.
- Time-sensitive automatic stop orders on Azithromycin and Oseltamivir therapies.
- Monitoring of antibiotic use, currently by direct expenditure, but with addition of Sentri7 software, we are now able to get Days of Therapy (DOT) data for each month starting January 2017. Opportunities for antibiotic improvement are discussed with the medical staff.
- Annual presentation of antibiogram to physician groups.
- Clinician, nursing, and pharmacist education regarding AMS and specific topics as needed (i.e. SPH Grand Rounds on extended-spectrum beta-lactamases, education to the Emergency Department on SPH Antibiogram and Management of Cellulitis, education to the pharmacists on AMS Program, annual nursing competency education focusing on AMS).